

## Abstract

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Title of diploma thesis: Diagnostics of toxoplasmosis

Worldwide widespread parasite *Toxoplasma gondii* (*T. gondii*) is an agent of toxoplasmosis infection. This infection is the most widespread antropozoon and pertains to the most frequent infectious disease, because it affects about one third of population in its latent form. For immunocompetent people infection is not a risk, its progress is asymptomatic and it causes lifelong latent infection. On the other hand for some of patients means toxoplasmosis weighty medical problem. There are mainly people with immunodeficiency after reactivation of latent form of infection, the primary infection in pregnant women, the infection is transmitted from mother to fetus and newborns with the congenital form of toxoplasmosis. The disease can have in these cases very serious consequences and fatal process. The *T. gondii* infection can be diagnosed by several methods. Methods are divided into direct, aimed at finding a microbe in biological material, and indirect methods, in which serologically show antibodies against infectious agents. The direct methods include histological examination, animal experiments and molecular biological methods, mainly polymerase chain reaction. Indirect methods for confirmation of infection are complement fixation reaction, enzymeimmunoassay and Western-blot.

In my diploma thesis I collect general information about *T. gondii*. The subject of this work is the analysis of women during pregnancy, women with complications, which are associated with pregnancy and newborns. Data of patients which were investigated by methods complement fixation reaction and enzymeimmunoassay I received from the Department of microbiology, University hospital in Hradec Králové.